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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,141	01/16/2002	Tetsuo Yamaguchi	2870-0177P	3642

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EXAMINER

CHEA, THORL

ART UNIT PAPER NUMBER

1752

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/046,141

Applicant(s)

YAMAGUCHI, TETSUO

Examiner

Thorl Chea

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 30, 2005 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (Ito) in view of JP11-149136 (JP'136) and Adin et al (Adin).

Ito a photothermographic material containing non-photosensitive silver halide, photosensitive silver halide, reducing agent for silver ions and binder and the compound of formula (1) to (3) claimed in the present claimed invention, and the amount thereof is within 1×10^{-6} mol to 1 mol/mol of silver halide. Note to the compound of formula (1) to (3) in column 18 and the amount thereof in column 33, lines 22-25.

The JP'136 discloses a heat-developable material containing non-photosensitive silver halide, photosensitive silver halide, reducing agent for silver ions and binder and the compound exemplified in the present application disclosure which is within the scope of formula (I) claimed in the present invention, and the amount thereof is from 1×10^{-6} mol to 1 mole/mol of silver

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halide. See the compound in column 1 (or Its English equivalent, US Patent No. 6,177,240, in columns 7-24; and in column 26, lines 37-40). This compound is within the scope of formula (I), which contains nitrogen containing heterocyclic compound, and the functional groups such as $-CO_2M$ which is within the scope of A-B of the formula (I). The compound provide photothermographic material high in D_{max} and sensitivity, enhanced enough in contrast, small in photographic performance due to fluctuation of development conditions and superior in effect of restraining dependence on development condition.

Adin discloses a spectrally sensitize within the scope of formula (I) of the claimed invention, and the amount thereof is from 1×10^{-8} to 2×10^{-3} mol per mol of silver in the emulsion layer. The compound is capable of enhancing both intrinsic sensitivity and the spectrally sensitivity of the silver halide emulsion, and the activity of the compound can be easily varied with substituents to control their speed and fog effects in a manner appropriate to the particular silver halide in which they are used. Note to the compound in column 4, especially lines 26-38 and 55-65, and the amount thereof in column 60, lines 5-18.

The teaching in Ito discloses a photothermographic material containing a compound of formula in (iv) of formula (1) to (3). The properties of the compound inherently meets the conditions (i) to (iii) presented in the claimed invention are considered as inherently associated with the compound of formula (1) to (3) of Ito et al. Ito fails to disclose the compound of formula (I) which however has been known and taught in JP'136 and Adin. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the compound taught in JP'136 to provide the photothermographic material with high in D_{max} and sensitivity, enhanced enough in contrast, small in photographic performance due to fluctuation of

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development conditions and superior in effect of restraining dependence on development condition, or the compound taught in Adin in the material taught in Ito enhance both intrinsic sensitivity and the spectrally sensitivity of the silver halide emulsion to provide the invention as claimed.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,764,816 (Ohzeki) in view of Ito et al (US Patent No. 6,150,084). The compound of group (iv) has been known as nucleating agent and taught in Ito in column 18, compounds (1), (2), (3). It would have been obvious to the worker of ordinary skill in the art at time the invention was made to use the nucleating agent taught in Ito to improve the image contrast of the material claimed in the '816 patent, and thereby provide an invention as claimed.

Response to Arguments

6. Applicant's arguments filed July 2004 have been fully considered but they are not persuasive for the reason set forth in the rejection above and the response to the applicants'

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argument set forth in the previous office action. The Declaration by Mr. Tetsu Yamaguchi submitted on July 12, 2004 fails to overcome the established prima facie case of obviousness rejection. First, the Declaration is not commensurate with the scope of the claimed invention. The Declaration shows only the compound within the scope of (iv) wherein the developed power is between 1300 to 1400 and covering power is from 220-230, wherein the scope of the claimed invention contains the compound in (iv) which is a compound within the scope of formula (1) of Ito, whereas the scope of the compounds claimed invention encompasses the scope of (1) to (3) disclosed in Ito et al. It is not apparent and applicants have not explained, why one of ordinary skill in the art would have extrapolated the results obtained from the compound of formula (2), (3) of Ito to provide a results that they considered to be unexpected by the worker of ordinary skill in the art. Second, the results would have been expected from the teaching of Ito and JP'136. See Ito in column 97-98, Table 23, wherein the value of D_{min} is lower than that shown in the Declaration, and the value of gamma samples is range from 14-15 substantially similar to that presented in the Declaration. See also the JP'136 (US 6,177,240), wherein the value of gamma is range from 13.8 to 14.6. Therefore, the differences between the value of gamma of the material shown in the Declaration and shown in the applied prior art of record found relatively small, and would not have found significant to be found unexpected by the worker of ordinary skill in the art at the time the invention was made. "Moreover, for a showing of "unexpected results" to be probative evidence of nonobviousness, the applicant has the burden of establishing that the differences in results between the examples compared are of practical significance and would have been unexpected to one skilled in the art. In re D'Ancicco, 439 F. 2d 1244; 169 USPQ 303 (CCPA 1971); In re Klosak, 455 F. 2d 1077, 173 USPQ 14 (CCPA 1972); In re

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Juillard, 476 F. 2d 1380, 177 USPQ 570 (CCPA 1973). In this case, results shown in Ito et al ('84) Table 23, in column 97-98 is same or better than those presented in the Declaration in term of Dmin, Dmax, relative sensitivity and contrast. The differences between the results associated with the samples containing the nucleating agent taught in Ito et al, and those containing a combination of the nucleating agent and the compound of formula (I) are not significant. See samples A-3 vs. A-4; A-5 vs. A-6; A-7 vs. A-8 and A-9 vs. A-10 wherein each pair of samples containing same nucleating agent, but the difference between the Dmin, Dmax and gamma are relatively small. The differences in sensitivity would have been expected by the worker of ordinary skill in the art since the adding the compound of JP'136 or Adin et al would increase the sensitivity of the material of Ito et al. See the problem solving disclosed in JP'136 which discloses that the compound taught therein provide a heat-developable material high in Dmax and sensitivity, enhance enough in contrast, small in photographic performance due to fluctuation of development conditions and superior in effect of restraining dependence on development condition. It is improper to use the samples A-1 or A-2 to compare with the inventive samples since the material of Ito et al require nucleating agent therein. Therefore, the samples A-1 to A-2 are relevant to the material of Ito et al.

The rejection under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,764,816 (Ohzeki) in view of Ito et al (US Patent No. 6,150,084) is maintained for failing to providing a terminal disclaimer to obviate the rejection.

Conclusion

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tchea *tlc*
August 5, 2005

Thorl Chea
Thorl Chea
Primary Examiner
Art Unit 1752